

REMARKS

Fig. 1 is currently amended to comply with 37 CFR 1.84(p)(5). The reference numeral “100” is included in the amended figure.

The abstract is currently amended to eliminate both occurrences of the reference numeral “48.”

Claims 1 and 2 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimi U.S. Patent No. 5,511,132 in view of Fukuda Japanese Patent Application Publication 11-215581. This rejection is respectfully traversed.

Regarding claim 1, according to the Office Action: “...Fukada [*sic*] teaches a bone conducting headset apparatus comprising a headset unit including an adjustable spring biased headset member including an adjustable length head strap (2) and a neck strap (1) provided with a spring biasing member...” However, Fukuda nowhere teaches “a neck strap provided with a spring biasing member,” as claimed in claim 1 of the instant application. The only description in the Fukuda abstract for the side band (1) is it “is metal or a side band made from plastics,” neither of which is a disclosure of a spring biasing member. Neither does Yoshimi teach the use of a neck strap with a spring biasing member.

The Office Action also says: “...the microphone/speaker unit (32) and further provided with an on/off switch (33) and means for positioning the electronic control member on a selected article of clothing worn by the user...” Yoshimi does not disclose any kind of means for positioning the electronic control means on clothing or any other item. Neither does Fukuda disclose a means for positioning the electronic control means on an article of clothing.

Additionally, the Office Action reads: “...an outer environmental noise component disposed at one end of the junctures between the head strap and the neck strap wherein, the at least one speaker/microphone member is disposed in intimate contact with the wearer’s head bone (4)...” It is respectfully submitted that the bone-conduction microphone (4) of the Fukuda abstract is not “at one end of the junctures between the head strap and the neck strap,” as claimed, but rather at a farthest point from either of these junctures while still on the head strap (2). Neither does Yoshimi disclose at least a

pair of speaker/microphone members including an inner bone conducting component and an outer environmental noise component disposed at one end of the junctures between the head strap and the neck strap.

Because neither Yoshimi nor Fukuda disclosed the elements detailed above, it is clear that it would *not* have been obvious to one of ordinary skill in the art at the time of the invention to provide the control unit of Yoshimi with the headset of Fukuda to allow the user to control the use of the headset mounted on articles of clothing and used in multiple operating situations.

Claims 3–14 and 17–19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimi in view of Fukuda, and further in view of Schreiber (U.S. Patent No. 4,791,673). This rejection is respectfully traversed.

With regard to claims 3 and 4, the Office Action states: “Yoshimi further discloses the electronic control member is further provided at least in part with a switch having a first push to talk position and a listen only position...” Yet Yoshimi does not disclose a listen only mode. Neither do Fukuda or Schreiber disclose a listen only mode.

The Office Action continues: “Yoshimi does not expressly disclose a third position for an intercom function. However, the use of bone conduction headsets as intercoms is well known in the art and Schreiber teaches a bone conduction headset for two way communication and for use as an intercom system.” However, it is to be noted that claims 3 and 4 claim a device having a **plurality of modes** – all switchable. In terms of the three claimed modes, Yoshimi, Fukuda, and Schreiber all disclose only single-mode devices. Although Schreiber suggests a variety of uses for his invention, he does not disclose a multi-use communication device. Therefore, it would not have been obvious for one of ordinary skill in the art at the time of the invention to utilize the bone conduction headset of Yoshimi as an intercom in noisy conditions.

Regarding claims 5–8, the Office Action asserts: “Yoshimi further discloses the electronic control member is further provided with high noise cut-off means wherein, noise above a preset decibel level will not be transmitted through the at least one speaker/microphone member (See col. 4, lines 6-12).” However, Yoshimi does not disclose a “high noise cut-off means wherein, noise above a preset decibel level will not

be transmitted through the at least one speaker microphone member,” as claimed. Instead, the operator manipulates “the changeover switch 33” (col. 4 line 10) to make use of “the solid-borne loudspeaker 24 and the amplifier 39 with the solid-born microphone 25.” (Col. 4 lines 11–13). Simply speaking, the user puts the transceiver (20) to his/her ear to be able to hear better in a noisy environment. This is in stark contrast to *disallowing* noises above a predetermined decibel level from transmitting. None of the referenced prior art patents (Yoshimi, Fukuda, and Schreiber) disclose a “high noise cut-off means wherein, noise above a preset decibel level will not be transmitted through the at least one speaker microphone member.” Hence it would not have been obvious to combine aspects of these disclosures to make a bone conducting communication device with a high noise cut-off means wherein, noise above a preset decibel level will not be transmitted through the at least one speaker microphone member.

Regarding claims 9–14, the Office Action reads: “However, the use of microphone pairs for directional hearing is well known in the art. Official Notice taken.” Applicants respectfully disagree that this is well known in the art. It is respectfully requested that evidence of this prior art be provided by the Patent Office. It would not have been obvious for one of ordinary skill to combine aspects of the referenced patents to provide a capability not disclosed in any of said referenced patents. Further, it has been shown that aspects of claims 1–6 were not obvious in light of the referenced patents (Yoshimi, Fukuda, and Schreiber). No prior art was shown to have the combination of claimed aspects of claims 9–14 with their respective dependencies. Therefore, it would not have been obvious to one of ordinary skill in the art at the time of the invention to use a pair of microphones for directional hearing in the device of Yoshimi to allow the user to easily determine the sound source.

As for claims 17–19, the Office Action reads: “...the use of a pair of speaker/microphone members wherein, both said pair of speaker/microphone members are disposed at a common point equivalent to the juncture of the head strap and the neck strap is well known in the art. Official Notice taken.” Applicants respectfully disagree that pairs of speaker/microphone members disposed at the juncture of a head and a neck strap are well known. It is respectfully requested that the Patent Office provide evidence that this prior art is known. It would not have been obvious for one of ordinary skill to

combine aspects of the referenced patents to provide a capability not disclosed in any of said referenced patents.

Further, it has been shown that aspects of claims 3, 5, and 9 were not obvious in light of the referenced patents (Yoshimi, Fukuda, and Schreiber). It would not have been obvious for one of ordinary skill to combine aspects of the referenced patents to provide the claimed combination of capabilities when such combination is not disclosed in any of said referenced patents.

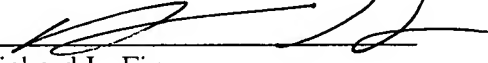
Additionally, claims 2-27 depend on claim 1, and because it is assumed claim 1 is allowable, claims 2-27 are also expected to be allowable.

Accordingly, because all claims 1-27 are believed to be clearly allowable, a notice to that effect is earnestly solicited.

Respectfully submitted,

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Date

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